

Role-Aware AI in Project Operations: The Read-Only Opee Architecture

Designing Enterprise-Safe AI Assistant Workflows That Respect Entra ID Security Scopes, Prevent Rate Leakage, and Accelerate Approval Lifecycles.

AUTHOR	DOCUMENT CLASS	TARGET AUDIENCE	TARGET PLATFORM
TimeOpera Architecture Team	Architecture Brief	CIOs, PMOs & Practice Directors	Microsoft 365 • SharePoint Online

EXECUTIVE SUMMARY

As organizations centralize communications in Microsoft Teams, document repositories in SharePoint Online, and user identities in Microsoft Entra ID, project time capture remains conspicuously marooned in external third-party tools. This operational fragmentation exposes billable rates to external cloud repositories, complicates tenant governance, and creates multi-day reconciliation bottlenecks during month-end billing. This briefing examines the architectural advantages of moving project time, multi-tier approvals, and commercial hour tracking natively inside the customer’s configured SharePoint site collection.

100%

TENANT DATA
SOVEREIGNTY

73%

FASTER APPROVAL
VELOCITY

0

EXTERNAL DATABASE
STORAGE

3.4x

INVOICE PREP
ACCELERATION

1. The Disconnected Timesheet Problem

Project-based businesses live and die by the integrity and speed of their time data. When consultants complete technical deliverables in Microsoft 365, forcing them to log hours in an unrelated SaaS portal produces predictable operational friction: delayed submissions, inconsistent task mapping, and lack of real-time budget visibility.

Worse, third-party databases introduce compliance vulnerabilities. Billing rates, customer project descriptions, and utilization metrics are duplicated into external cloud environments, increasing audit exposure and violating strict client data residency commitments.

2. The Tenant Sovereignty Mandate

TimeOpera was architected to solve this disconnect by establishing a **zero-external-database** paradigm. Instead of transmitting timesheets to an external vendor cloud, TimeOpera writes and maintains project time directly inside a dedicated SharePoint Online site collection owned and governed by the customer’s IT tenant.

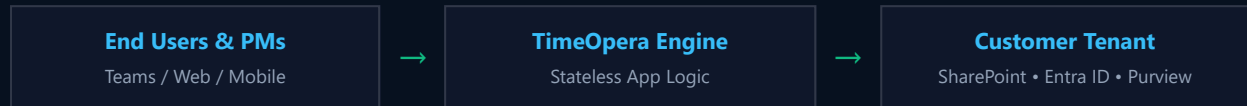
CORE SECURITY ASSURANCES

- All timesheet rows reside in customer SharePoint lists.
- Authentication is 100% native via Microsoft Entra ID (SSO).
- Customer IT maintains complete backup, retention, and Purview governance.

3. Native Microsoft 365 Operating Architecture

TimeOpera functions as an enterprise operational extension within the client's Microsoft 365 ecosystem. By leveraging Microsoft Graph APIs and modern web application frameworks, TimeOpera provides a lightning-fast interface while delegating all data storage and permissions directly to Microsoft 365.

FIGURE 1: TIMEOPERA NATIVE MICROSOFT 365 TENANT BOUNDARY FLOW



4. Commercial Hours Classification

Standard timesheet software only records hours without understanding financial contracts. TimeOpera establishes distinct commercial classification boundaries:

DELIVERY & CONTRACT SCOPES

■ TIME & MATERIALS (T&M):

Real-time burn against approved client purchase orders.

■ FIXED FEE / SOW MILESTONES:

Tracking effort against fixed contract caps to spot scope creep early.

■ PREPAID RETAINERS:

Automatic monthly drawdown of recurring consulting hours.

OPERATIONAL OVERHEAD TRACKING

■ INTERNAL R&D:

Capturing capitalization costs for product development.

■ WARRANTY / SCOPE CORRECTION:

Quantifying rework effort without billing the customer.

■ PTO & HOLIDAYS:

Synchronized calendar management for resource scheduling.

5. Comparative Analysis: Disconnected SaaS vs. TimeOpera

EVALUATION DIMENSION	TRADITIONAL DISCONNECTED SAAS	TIMEOPERA M365 NATIVE PLATFORM
Data Location	Vendor External Database (Third-party hosted)	Customer SharePoint Tenant (Full customer control)
Identity & Governance	Duplicate credentials or external SCIM sync	Native Entra ID (Zero credential sync latency)
Approval Workflows	External portal notifications and manual chasing	Multi-tier role approvals directly inside M365
Invoice Preparation	Multi-day manual CSV exports, pivot tables	Instant Power BI reconciliation & billing views
AI Security Boundaries	Broad training on external LLM vendor servers	Read-only Opee AI strictly scoped to user role

6. Role-Aware AI: The Opee Assistant Protocol

Artificial intelligence in project operations must be implemented with strict guardrails. Unrestricted AI models querying timesheets risk leaking billing rates, executive margin targets, or confidential project descriptions to unauthorized employees.

TimeOpera incorporates **Opee**, an AI assistant governed by three fundamental design tenets:

Tenet 1: Strictly Read-Only Operations

Opee cannot modify timesheets, change approvals, or alter financial bill rates. Its mandate is pure operational visibility: surfacing unsubmitted hours, overdue manager approvals, and SOW milestone thresholds.

Tenet 2: Strict Entra ID Role Scoping

Consultants querying Opee only receive visibility into their own assigned tasks and approved time. Only designated Project Managers and Finance Admins can inspect project-wide financial burn and utilization summaries.

7. Enterprise Deployment Roadmap

Because TimeOpera requires no external database provisioning or complex server setup, organizations deploy the platform in under twenty minutes:

PHASE 01

Marketplace Acquisition

Acquire TimeOpera directly from Microsoft AppSource into your tenant.

PHASE 02

SharePoint Binding

Designate the dedicated SharePoint site collection for business data.

PHASE 03

Role Authorization

Map Entra ID groups to project roles (Consultant, PM, Finance Admin).

PHASE 04

Operational Launch

Import active project codes and begin daily time entry and approvals.

CONCLUSION & STRATEGIC RECOMMENDATION

For organizations committed to Microsoft 365, consolidating timesheets, project approvals, and billing preparation within SharePoint Online is the most secure, cost-effective, and audit-compliant path forward. TimeOpera delivers this capability without licensing overhead or data migration complexity.

Ready to Modernize Your Project Time Operations?

Start your guided onboarding or schedule a technical briefing at timeopera.app/onboarding • Contact our solutions architecture team at support@reality-tech.com.